

ABSTRACT

[Abstract]

[Problem]

To provide a current limiter circuit and a motor drive circuit, which can protect a power transistor of a driver IC by preventing an over-current thereof when an externally provided reference voltage generator circuit for detecting a rated current value malfunctions and can allow a continuous use of the driver IC.

[Means for Resolution]

A current limiter circuit in an IC including a power transistor and an output current detection circuit connected in series with the power transistor, comprises a comparator, a first reference voltage generator circuit and a second reference voltage generator circuit. The comparator generates a control signal for stopping a drive of the power transistor for a predetermined time according to a detection signal obtained by the output current detection circuit and a first reference voltage obtained by the first reference voltage generator circuit when an output current of the power transistor reaches a predetermined predetermined limit value and the comparator generates the control signal according to a detection signal obtained by the output current detection circuit and a second reference voltage obtained by the second reference voltage generator circuit when the output current of the power transistor reaches a predetermined value larger than the predetermined limit value. The first reference voltage generator circuit is proved externally of the IC and the second reference voltage generator circuit is included within the IC.

[Selected Drawing] Fig. 1